Complete Listing of the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1. (Original)   A method for transmitting moving pictures experts group (MPEG) frames between a data over cable services interface specification (DOCSIS) based satellite modem termination system (SMTS) and a corresponding satellite modem (SM) system, the method comprising:

identifying at least one data stream requiring transmission between the SMTS and the SM, the data stream including one or more MPEG frames;

organizing the MPEG frames within SMTS data queues in accordance with predetermined parameters; and

transmitting the MPEG frames based upon their organization within the data queues.

2. (Original)   The method of claim 1, further comprising associating the transmitted frames with the predetermined parameters.

3. (Original)   The method of claim 1, wherein the organizing includes processing the data queues based upon predetermined priorities.

4. (Original)   The method of claim 3, wherein the predetermined priorities include at least one from group including (i) a highest to lowest rate order, (ii) a highest to lowest priority order, and (iii) a lowest to highest rate order.

5. (Original)   The method of claim 1, wherein the organizing is based upon destination address to queue mapping.

6. (Original)   The method of claim 1, wherein the predetermined parameters include at least one from the group including forward error correction rate, modulation type, and signal to noise ratio.

7. (Original)   The method of claim 6, wherein the predetermined parameters are associated with downlink transmissions.

8. (Original)   An apparatus for transmitting moving pictures experts group (MPEG) frames between a data over cable services interface specification (DOCSIS) based satellite modem termination system (SMTS) and a corresponding satellite modem (SM) system, the apparatus comprising:

means for identifying at least one data stream requiring transmission between the SMTS and the SM, the data stream including one or more MPEG frames;

means for organizing the MPEG frames within SMTS data queues in accordance with predetermined parameters; and

means for transmitting the MPEG frames based upon their organization within the data queues.

9. (Original)   The apparatus of claim 8, further comprising means for associating the transmitted frames with the predetermined parameters.

10. (Original) The apparatus of claim 8, wherein the means for organizing includes assessing queue block priorities.

11. (Original) The apparatus of claim 8, wherein the predetermined priorities include at least one from group including (i) a highest to lowest rate order, (ii) a highest to lowest priority order, and (iii) a lowest to highest rate order.

12. (Original) The apparatus of claim 8, wherein the means for organizing is based upon destination address to queue mapping.

13. (Original) The apparatus of claim 12, wherein the mapping includes a content addressable memory scheme.

14. (Original) The apparatus of claim 8, wherein the predetermined parameters include at least one from the group including forward error correction rate, modulation type, and signal to noise ratio.

15. (Original) The apparatus of claim 14, wherein the predetermined parameters are associated with downlink transmissions.